

REMARKS

Claims 1-21 are now pending in the application. Claims 1, 5, 9, 11 and 18 have been amended.

Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

Rejections Under 35 U.S.C. § 103

Claims 1-4 and 11-13 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pohl (U.S. No. 4,772,019) in view of Glorioso et al. (U.S. No. 6,301,105).

Claims 5-10 and 18-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Makaran (U.S. No. 5,774,921).

Claims 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pohl (U.S. No. 4,772,019) in view of Makaran (U.S. No. 5,774,921).

Claims 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Makaran (U.S. No. 5,774,921) in view of Pohl (U.S. No. 4,772,019).

In order to provide a *prima facie* showing of obviousness under 35 U.S.C. § 103(a), all the claim limitations must be taught or suggested by the prior art. See, e.g., *In re Royka*, 490 F. 2d 981, 180 U.S.P.Q. 580 (CCPA 1974); MPEP 2143.03.

The invention of claims 1, 5, 11 and 18 includes first stopping a fan when a fan locked situation happens, then, this fan is restarted again after a special time-period. In the claimed invention, "Cutting off" power means the power has been off. "Stopping" the fan means to temporarily stop transferring drive signal to the fan. In this case, the fan stops rotating until a drive signal is sent to the fan again. In other words, in the claimed invention, when the number of stopping fan is equal to a special number, the power is still on but the signal controlling the fan to rotate is not transferred to the fan. Therefore, the fan stops rotating.

The Examiner's combination of the references, however, does not teach or suggest the claimed invention. In particular, Pohl directly de-energizes the motor when a locked condition happens, which is different from the claimed invention of stopping the fan. According to Pohl, as shown in figure 2, in view of the drive requirements of the coils 208 and 210, a switch is typically included in series with the lines 212 and 214. Therefore, a switching element 60 is connected between the fan motor 48 and microcontroller 200 to control the supply of the drive voltage V to the fan. When a compressor stall happens, the switch 60 is open to **cut off the power supplied** to the fan 48. Therefore, in the cited reference, the term "de-energize" is meant by Pohl to cut off the connection between the fan 48 and the drive voltage V. That is, the fan power is off. Therefore, the cited reference has to "restart" the fan, which is different from this invention.

Moreover, the main purpose of the Pohl invention is to provide an alternative compressor system to protect a refrigeration system, which is different from the claimed invention that is for protection of the fan.

On the other hand, Glorioso does not teach to repeatedly perform the claimed stopping step and restarting step.

It is noticed that the main purpose of the Glorioso invention is to reduce the noise of a disk drive. The main purpose of the Pohl invention is to provide an alternative compressor system to protect a refrigeration system. The two cited references are not in the same technical field. Therefore, there is no adequate suggestion or motivation to combine the teachings of Pohl with Glorioso to achieve the claimed invention.

Therefore, independent claims 1 and 11 are patentable over the cited references and are believed in condition for allowance.

Moreover, Makaran discloses a control system. According to the flow chart as shown in figure 10, at step 434, **power to motor 102 is cut** if a stall or reduced speed condition is detected in order to protect motor 102 and power stage 112 when rotation of rotor 116 is obstructed. That is, the power is off in the Makaran system when a stall or reduced speed condition is detected. Although Makaran also discloses to restart the fan, the term "restart the fan" is meant by Makaran to start a fan whose power has been off which is different from the claimed invention. Therefore, Makaran does not disclose or teach the claimed feature.

Therefore, independent claims 5 and 18 are patentable over the cited references and are believed in condition for allowance.

In view of the foregoing, Applicant respectfully submits that independent claims 1, 5, 11 and 18 are patentable over the cited references and in condition for allowance. Further, Applicant respectfully submits that dependent claims 2-4, 6-10, 12-17 and 19-

20, which ultimately depend from claims 1, 5, 11 and 18, are likewise patentable and in condition for allowance. Withdrawal of the rejections under 35 U.S.C. § 103(a) is, therefore, respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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